



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0679; Project Identifier MCAI-2021-01213-T]

RIN 2120-AA64

Airworthiness Directives; MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking (SNPRM).

SUMMARY: The FAA is revising a notice of proposed rulemaking (NPRM) that would have applied to all MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes, Model CL-600-2C11 (Regional Jet Series 550) airplanes, Model CL-600-2D15 (Regional Jet Series 705) airplanes, Model CL-600-2D24 (Regional Jet Series 900) airplanes, and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. This action revises the NPRM by proposing to require revising the existing maintenance or inspection program, as applicable, to incorporate two aircraft maintenance manual (AMM) tasks. The FAA is proposing this airworthiness directive (AD) to address the unsafe condition on these products. Since these actions would impose an additional burden over those in the NPRM, the FAA is requesting comments on this SNPRM.

DATES: The FAA must receive comments on this SNPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for submitting comments.

- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-0679; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, this SNPRM, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Chirayu A. Gupta, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyacocos@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2022-0679; Project Identifier MCAI-2021-01213-T” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all

comments received, without change, to [regulations.gov](https://www.regulations.gov), including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this SNPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this SNPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this SNPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this SNPRM. Submissions containing CBI should be sent to Chirayu A. Gupta, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA issued an NPRM to amend 14 CFR part 39 by adding an AD that would apply to all MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes, Model CL-600-2C11 (Regional Jet Series 550) airplanes, Model CL-600-2D15 (Regional Jet Series 705) airplanes, Model CL-600-2D24 (Regional Jet Series 900) airplanes, and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. The NPRM published in the *Federal Register* on June 16, 2022 (87 FR 36269). The NPRM was prompted by AD CF-2021-38, dated November 5, 2021, issued by Transport Canada,

which is the aviation authority for Canada. Transport Canada issued AD CF-2021-38, dated November 5, 2021, to address an unsafe condition.

In the NPRM, the FAA proposed to require revising the existing maintenance or inspection program, as applicable, to incorporate new and more restrictive airworthiness limitations.

You may examine Transport Canada AD CF-2021-38, dated November 5, 2021, in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-0679.

Actions Since the NPRM was Issued

Since the FAA issued the NPRM, the FAA determined it was necessary to require revising the existing maintenance or inspection program, as applicable, to incorporate two AMM tasks.

In addition, Transport Canada revised AD CF-2021-38, dated November 5, 2021, and issued Transport Canada AD CF-2021-38R1, dated May 25, 2022 (Transport Canada AD CF-2021-38R1) (also referred to as the MCAI), to correct an unsafe condition for all MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes, Model CL-600-2C11 (Regional Jet Series 550) airplanes, Model CL-600-2D15 (Regional Jet Series 705) airplanes, Model CL-600-2D24 (Regional Jet Series 900) airplanes, and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. The MCAI states there have been in-service reports of emergency ram air valve part number GG670-95019-1 stuck in closed or partially open positions. An investigation revealed that the emergency ram air valve is failing due to corrosion of multiple sub-components, which causes an increase in the breakaway torque that cannot be overcome by the valve actuator. This condition, if not corrected, could result in a complete loss of outside air supply, leading to an increase in flight deck and cabin temperatures and a possible increased level of contaminated air (carbon monoxide, carbon dioxide, or ozone).

The FAA is proposing this AD to address the unsafe condition on these products.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-0679.

Comments

The FAA received comments from the Air Line Pilots Association, International, who supported the NPRM without change.

The FAA received additional comments from MHI RJ Aviation ULC. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Revise Model Designations

MHI RJ Aviation ULC requested that paragraph (g)(1) of the proposed AD be revised to read “[MHI RJ] CRJ550/700/900/1000 Series Regional Jet Series” instead of “[MHI RJ] CRJ700/900/1000 Series Regional Jet Series.”

The FAA disagrees. The citations for required documents match the nomenclature of the cited documents. For the Temporary Revision (TR) ALI-0744, dated April 27, 2021, the first page of the document only identifies “CRJ700/900/1000 Series Regional Jet.” Therefore, the correct citation should be “[MHI RJ] CRJ700/900/1000 Series Regional Jet Temporary Revision (TR) ALI-0744, dated April 27, 2021.” However, that temporary revision is no longer cited in this proposed AD; therefore, the FAA has not changed this proposed AD in this regard.

Request to Revise Reference to the MCAI

MHI RJ Aviation ULC requested that paragraph (j)(1) of the proposed AD be revised to refer to “CF-2021-38R1” instead of “CF-2021-38.”

The FAA agrees and has revised paragraph (j)(1) of this proposed AD (of the SNPRM) accordingly.

Additional Changes Made to this Proposed AD

This proposed AD (of the SNPRM) introduces new candidate certification maintenance requirement (CCMR) intervals that the FAA cannot mandate as CCMRs as specified in the temporary revisions cited in the proposed A. Therefore, the FAA proposes to mandate two AMM tasks as specified in Figure 1 to paragraph (g)(1) and Figure 2 to paragraph (g)(2) of the proposed AD (of the SNPRM). In addition, the figures include the on-condition replacement requirements specified in Transport Canada AD CF-2021-38R1, which were not included in the proposed AD (of the NPRM).

FAA's Determination

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA is issuing this SNPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Certain changes described above expand the scope of the NPRM. As a result, it is necessary to reopen the comment period to provide additional opportunity for the public to comment on this SNPRM.

Proposed AD Requirements in this SNPRM

This proposed AD would require revising the existing maintenance or inspection program, as applicable, to incorporate two AMM tasks.

Costs of Compliance

The FAA estimates that this proposed AD affects 1,158 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

The FAA has determined that revising the maintenance or inspection program takes an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. Since operators incorporate maintenance or

inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, the agency estimates the average total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and

(3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.):

Docket No. FAA-2022-0679; Project Identifier MCAI-2021-01213-T.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all MHI RJ Aviation ULC airplanes, certificated in any category, identified in paragraphs (c)(1) through (5) of this AD.

(1) Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes.

(2) Model CL-600-2C11 (Regional Jet Series 550) airplanes.

(3) Model CL-600-2D15 (Regional Jet Series 705) airplanes.

(4) Model CL-600-2D24 (Regional Jet Series 900) airplanes.

(5) Model CL-600-2E25 (Regional Jet Series 1000) airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 21, Air conditioning.

(e) Reason

This AD was prompted by a determination that the existing maintenance or inspection program, as applicable, must be revised to incorporate two aircraft manual (AMM) tasks. The FAA is issuing this AD to address in-service reports of emergency ram air valve part number (P/N) GG670-95019-1 stuck in closed or partially open positions, which, if not corrected could result in a complete loss of outside air supply, leading to an increase in flight deck and cabin temperatures and a possible increased level of contaminated air (carbon monoxide, carbon dioxide, or ozone).

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Maintenance or Inspection Program Revision

(1) Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in figure 1 to paragraph (g)(1) of this AD. The initial compliance time for doing the task is at the applicable time specified in paragraph (g)(1)(i) or (ii) of this AD.

Figure 1 to paragraph (g)(1) – AMM Task for the Ram-Air Valve

Effectivity	Interval	AMM Task Number *
All	1800 FH	21-52-04-710-801-A01, as specified in AMM Revision 70, dated May 25, 2022, or later revisions

Effectivity	Interval	AMM Task Number *
<p>* If, during any of the operational checks of the valve, the valve itself is found inoperable, before further flight, remove and replace valve P/N GG670-95019-1 with a serviceable part. The replacement of an inoperable valve with a serviceable valve on an airplane can be deferred in accordance with the applicable instructions and limitations of MMEL item 21-52-01, sub-item 2 or 3 (only for models CL-600-2C10 or CL-600-2D15/CL-600-2D24 respectively). To defer the valve replacement, the ram air shutoff valve is deactivated in the open position in accordance with AMM task 21-52-00-040-802 and the airplane is operated in accordance with the MMEL operating procedure.</p>		

(i) For airplanes that have accumulated less than 1,800 flight hours since the last operational check of the ram air shutoff valve was performed as specified in AMM Task 21-52-04-710-801-A01, and for airplanes that have accumulated less than 1,800 flight hours from the date of issuance of the original airworthiness certificate or original export certificate of airworthiness: Within 90 days after the effective date of this AD, or before accumulating 1,800 total flight hours, whichever occurs later.

(ii) For airplanes that have accumulated 1,800 flight hours or more since the last operational check of the ram air shutoff valve was performed as specified in AMM Task 21-52-04-710-801-A01, and for airplanes that have accumulated 1,800 flight hours or more since the date of issuance of the original airworthiness certificate or original export certificate of airworthiness and for which no operational check of the valve has been performed: Within 90 days after the effective date of this AD or before accumulating 3,000 total flight hours, whichever occurs later.

(2) Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in figure 2 to paragraph (g)(2) of this AD. The initial compliance time for doing the task is at the applicable time specified in paragraph (g)(2)(i) or (ii) of this AD.

Figure 2 to paragraph (g)(2) – AMM Task for the Pack Discharge and Ram-Air Supply Ducts

Effectivity	Interval	AMM Task Number *
All	17600 FH	21-51-00-220-801-A01, as specified in AMM Revision 70, dated May 25, 2022, or later revisions
<p>* If damage is found during any of the detailed inspections of the pack discharge and ram air supply ducts, such as: wear, cuts, holes, signs of leakage, signs of overheating, or damage to the duct insulation, before further flight, replace the damaged component(s) in accordance with AMM 21-52-06 for the ram air supply duct, AMM 21-51-26 for the left pack discharge duct, and AMM 21-51-28 for the right pack discharge duct. If parts are not available, contact MHI RJ for an approved disposition. The approved disposition must specifically refer to Part II. of Transport Canada AD CF-2021-38R1.</p>		

(i) For airplanes that have accumulated less than 17,600 flight hours since the last detailed inspection of the pack discharge and ram air supply ducts was performed as specified in AMM Task 21-51-00-220-801-A01, and for airplanes that have accumulated less than 17,600 flight hours since the date of issuance of the original airworthiness certificate or original export certificate of airworthiness: Within 90 days after the effective date of this AD, or before accumulating 17,600 total flight hours, whichever occurs later.

(ii) For airplanes that have accumulated 17,600 flight hours or more since the last detailed inspection of the pack discharge and ram air supply ducts as specified in AMM Task 21-51-00-220-801-A01, and for airplanes that have accumulated 17,600 flight hours or more since the date of issuance of the original airworthiness certificate or original export certificate of airworthiness, and for which no detailed inspection of the pack discharge and ram air supply ducts has been performed: Within 90 days after the effective date of this AD.

(h) No Alternative Actions or Intervals

After the existing maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals, may be

used unless the actions and intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (i)(1) of this AD.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or MHI RJ Aviation ULC's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Additional Information

(1) Refer to Transport Canada AD CF-2021-38R1, dated May 25, 2022, for related information. This Transport Canada AD may be found in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-0679.

(2) For more information about this AD, contact Chirayu A. Gupta, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart

Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyacos@faa.gov.

(k) Material Incorporated by Reference

None.

Issued on January 2, 2023.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2023-00130 Filed: 1/12/2023 8:45 am; Publication Date: 1/13/2023]